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HOUSING FIRST FOR SEVERELY MENTALLY ILL HOMELESS METHADONE PATIENTS

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The Housing First approach used by Pathways to Housing, Inc., was used to enhance residential independence and treatment retention of homeless, seriously mentally ill methadone patients. The Keeping Home project first secured scattered-site apartments and assertive community treatment services and then addressed patients' service needs. Three years post-implementation, methadone treatment retention for 31 Keeping Home patients versus 30 comparison participants (drawn from an administrative database) was 51.6% vs. 20% ($p < .02$); apartment/independent housing retention was 67.7% vs. 3% or 13% (both p's $< .01$). Although results firmly support Keeping Home, future research needs to address study's possible database limitations.

KEYWORDS. Homelessness, methadone patients, mental illness, independent housing

INTRODUCTION

Homelessness is a significant obstacle to regular participation in methadone maintenance treatment especially for inmate patients released after short sentences in the Key Extended Entry Program[1] (KEEP) of the New York City jails. In the KEEP, heroin addict arrestees can be inducted on methadone maintenance treatment in jail or, if already a patient, continue treatment there. At release, patients are medicated and given an appointment to report to a community-based methadone maintenance treatment program. Seventy-eight percent keep their referral appointment. However, of the 22% who do not report, which equated to hundreds of individuals annually, more than three-quarters are homeless and have co-occurring psychiatric conditions.[2]

This project was funded in 2003 by a contract from the United States Department of Housing and Urban Development's (HUD) Shelter Plus Care, Supported Housing Program (SHP), to Pathways to Housing, Inc., (PTH), Sam Tsemberis, PhD, Principal Investigator. Additional support was provided by the New York State Office of Mental Hygiene (OMH).

Mr. Karl Loutsis and Mr. William Griffin of OASAS were instrumental in providing support by coordinating the relationship between Mt. Sinai Hospital's Narcotic Rehabilitation Center (NRC), the methadone maintenance treatment program for most of the Keeping Home patients, and PTH's ACT team staff and central office, arranging in-kind support to meet HUD's state fiscal matching requirement. OMH provided direct fiscal support when the in-kind match was disallowed.

Many agencies and individuals contributed to this demanding, complicated effort including the Commissioner of the NYC Department of Correctional Services (DOCS), Mr. Martin Horn, who vigorously supported the project, Kathleen Coughlin, Assistant Commissioner of Discharge Planning, NYC DOCS. The NYC Department of Health and Mental Hygiene, the NYS Department of Mental Health, Prison Health Services in the Riker's Island Jail, the successful efforts of PTH's staff to gain patients' acceptance for the project, the ACT team members, and the committed staff of Mt. Sinai's NRC and Dr. Bryan Fallon, in working with the serious problems patients presented. It is troubling and sad that for institutional-economic reasons, the NRC was closed after many years of quality community service.

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The Keeping Home project was developed by the New York State Office of Alcoholism and Substance Abuse Services (OASAS) and Pathways to Housing, Inc., to address the residential and service needs of homeless, dually diagnosed KEEP patients and dually diagnosed non-KEEP methadone patients with recent criminal justice involvement. Funded by the federal Department of Housing and Urban Development, Keeping Home uses the Housing First approach,[3] which Pathways to Housing, Inc., originated, to address the needs of homeless, seriously mentally ill substance abusers. Specifically, Keeping Home first secures market-rate, scattered site apartments for seriously mentally ill methadone maintenance treatment patients and then, through in vivo assertive community treatment supports (i.e., psychiatric, nursing, vocational, social, and peer), addresses patients' service needs.

The Housing First approach has shown more sustained housing independence and better treatment compliance than the traditional linear, continuum of care or Treatment First approach,[4,5] which, by contrast, entails levels of shelter, sobriety, and treatment compliance requirements and an ongoing threat of housing loss for substance abuse or relapse. The authors expected that Keeping Home patients would have better methadone maintenance treatment participation (i.e., retention) and residential outcomes (i.e., independence and stability) than patients admitted during 2005–2006 (Keeping Home intake period), with comparable residential, psychiatric, and criminal justice characteristics and given available housing and support services. This report presents an evaluation of the Keeping Home project where comparison patients were selected from the OASAS' administrative client database.

METHOD

A grant for 25 apartments with assertive community treatment services was obtained in 2003 from the Federal Department of Housing and Urban Development (HUD). Patients were recruited from jail near their release, hospitals, drop-in centers, and other local sites; placements in apartments began in March 2005. Thirty-one patients, including replacements for patients discharged during the funding period, were included in the study; enrollment was completed by July 2006.

For Keeping Home and comparison patients, being homeless meant living in a shelter or other indoor facility or on the streets/other public places. For Keeping Home patients only (HUD criteria), mental illness required being diagnosed as seriously and persistently mentally ill with a primary Axis I diagnosis, such as major depression, schizophrenia, or bipolar disorder.[6] A diagnosis was determined from psychiatric hospital records or an interview done by an independent, board-certified psychiatrist. Data to assess persistence for a seriously and persistently mentally ill diagnosis were obtained using a followback timeline interview focused intensively on the prior 4 years with broader coverage lifetime.[5]

Comparison patients were screened in if there was a "Yes" answer to the item: "Ever been treated for mental illness" or "Entered methadone maintenance treatment with a co-occurring psychiatric condition." Psychiatric diagnosis per se is not in the OASAS data system, which is a limitation of matching using an administrative database. The co-occurring disorders for comparison patients could therefore cover a wider range of diagnoses than that of the Keeping Home patients.

Data for the Keeping Home patients from Pathways to Housing, Inc., included demographics, mental health history and diagnoses, criminal justice history, substance abuse and prior treatment, history of homelessness, and admission and discharge data. All Keeping Home patients consented to use of their anonymous information for program evaluation. In March 2007, assertive community treatment team staff was interviewed on changes in Keeping Home patient project status (i.e., discharge, transfer, mortality, methadone maintenance treatment participation), arrests, illicit substance use, hospitalizations, and housing changes. Code numbers were used in databases and Pathways to Housing, Inc., kept a secured list of patient names and code numbers.

Twenty-six of the 31 Keeping Home patients were enrolled in a community-based methadone maintenance treatment program, the Narcotic Rehabilitation Center, which closed unexpectedly in December 2008, precluding access to full patient treatment and medical histories. The OASAS data system provided a partial alternative: using a tracking identification code supplied by Pathways, OASAS was able to match 27 of the 31 Keeping Home patients for methadone maintenance treatment admission and discharge information.

Comparison participants had to have: (1) enrolled in methadone treatment during 2005–2006; (2) an admission code of "Yes" for entered with co-occurring psychiatric disorder or ever treated for mental illness; (3) a criminal justice status (e.g., parole, probation, alternative-to-incarceration or recent incarceration); and (4) entered treatment homeless as defined earlier. The pool meeting the four criteria in December 2005, the middle of intake for Keeping Home patients, was 247 of a total patient population of 40,500. Comparison sample size (n = 30) was chosen for convenience; the 30 patients were selected randomly from the pool.

Other limitations to matching besides the difference in severity of psychiatric conditions for the Keeping Home patients and comparison patients include the following:

1. At admission, a methadone maintenance treatment patient may claim to be living in a private residence (shared or not), when it might only be a mail drop. All Keeping Home patients had their own apartments.
2. Programs keep their original discharge code even if they find out that a patient discharged as lost to contact died. The OASAS client data system may underreport mortality discharges.
3. The OASAS database does not reflect intermediate changes of status, only status at admission and discharge.

Pathways' records provided days housed in an apartment and months retained in methadone maintenance treatment for most patients; the OASAS database provided days in methadone maintenance treatment for most Keeping Home and all comparison patients.

Incomplete data or missing matches led us to infer 7 Keeping Home patients' methadone maintenance treatment outcomes. For example, if a patient was transferred to an inpatient mental health or substance abuse treatment program, we concluded their treatment ceased—methadone maintenance treatment services are nonexistent in such facilities. We also decided, conservatively, that methadone maintenance treatment services ceased for treatment-neutral outcomes (i.e, changed apartment), making empirical support for Keeping Home more difficult to achieve.

The first assessment was in March 2007, two years after the first Keeping Home patient was housed, and the second in June 2008. *T* tests and Chi square were used to evaluate differences in demographic and pretreatment variables. Tests of independent proportions were performed on the percentages of Keeping Home patients and comparison participants retained in methadone maintenance treatment and on the percentages of patients retained in independent housing.

RESULTS

Before getting their apartments 21 (68%) of the 31 Keeping Home patients were homeless on the streets, and 5 (16%) were homeless but living in shelters; the remaining 5 (16%) were escorted directly from jail or a psychiatric hospital to their Keeping Home apartment. Methadone doses were 20 to 160 mg daily (mean = 80 mg). Twenty (71%) of the 28 Keeping Home patients with dosage information were receiving doses of 70 to 80 mg or more, consistent with best practices.[7]

Table 1 shows that the Keeping Home patients were older (45.9 vs. 39.7 years old , respectively, $t\ [59] = 1.82$, $p < .05$), were more likely to enter the project from living in the streets or other public places (Chi Square = 17.3, $p < .001$), and by selection, the severity and chronicity of their psychiatric diagnoses likely exceeded that of the comparison patients.

TABLE 1. Keeping Home and Comparison Participant Demographics

Patient characteristics	Keeping home patients (n = 31) No.	%	Comparison participants (n = 30) No.	%
Gender				
Female	5	19.2	11	36.7
Male	26	80.8	19	63.3
Age, y				
18–33	4	12.9	7	23.3
34–49	18	58.1	20	66.7
50–65	9	29.0	3	10.0
Range	26–63	23–56		
Mean	45.9		39.7	
Race/ethnicity				
Caucasian (not Hispanic)	11	35.5	4	13.3
Black (not Hispanic)	6	19.3	3	10.0
Hispanic	14	45.2	22	73.3
Unknown	0	0.0	1	3.3
Level of education				
8th to 11th grade	14	45.2	18	60.0
High school diploma/GED/vocational school/trade/business/some college	8	25.8	8	26.7
Bachelors	5	16.1	4	13.3
Missing	4	12.9	0	0
Psychiatric diagnosis				
Axis I				
Major depression	10	32.2		
Bipolar	9	29.0		
Schizophrenia	6	19.3		
Other	4	12.9		
Missing	2	6.4		
One or more secondary diagnoses	9	29.0		
Co-occurring psychiatric disorder	0	0.0	30	100
Residence at admission				
Streets/subways/parks/abandoned building/drop-in centers	21	67.7	9	30.0
Homeless shelter/safe haven	5	16.1	21	70.0
Psychiatric hospital/hospital	3	9.7	–	–
Jail, other institution	2	6.4	–	–

However, the differences in sex, ethnicity, and level of education were not significant (all p's > .05).

SELECTED TREATMENT AND CLINICAL OUTCOMES

Illustrative of the problems facing the Keeping Home patients, 39% had at least one psychiatric (re-)hospitalization; 43% had used illicit drugs, mainly crack/cocaine. Twenty-nine percent had at least one inpatient substance abuse treatment admission; and 32% had at least one arrest, mainly for drug possession. Aside from patients discharged from the project (i.e., vacated their Keeping Home apartment), none lost their apartments.

RETENTION: KEEPING HOME VERSUS COMPARISON PATIENTS

Retention in treatment was measured using the percentages of Keeping Home patients and comparison participants remaining in treatment by the first and second assessment. Housing independence and stability was assessed by comparing the percentage of Keeping Home patients in their apartments to the percentage of comparison participants housed by OASAS criteria (living in a private residence/single-room occupancy setting) at the first and second assessment.

Retention in Methadone Maintenance Treatment: March 2007 Assessment

Six patients were discharged from Keeping Home and likely discontinued methadone maintenance treatment: two patients died and two were transferred to inpatient settings with no methadone maintenance treatment services. We concluded the remaining two with unspecified methadone maintenance treatment outcomes also discontinued methadone maintenance treatment. Five additional Keeping Home patients self-reported discontinuing methadone maintenance treatment but staying in their apartments, for a total of 11 (35.5%) of 31 Keeping Home patients confirmed/judged to have discontinued methadone maintenance treatment. By March 2007, 20 (66.7%) of the 30 comparison patients had been discharged from methadone maintenance treatment; Keeping Home patients' retention rate was approximately double the comparison patients', 64.5 vs. 33.3%, as shown in Table 2.

June 2008 Assessment

Two more Keeping Home patients stopped methadone maintenance treatment between March 2007 and June 2008: one died and the other was transferred to a non-methadone, residential drug abuse treatment program. The remaining two transferred to other apartment/housing programs; we assumed they also stopped methadone maintenance treatment. Therefore, as of June 2008, sixteen of 31 Keeping Home patients were retained in methadone maintenance treatment. By June 2008, four more comparison patients were discharged so that only 6 of the original 30 were in treatment. The Keeping Home patient retention rate was more than double the comparison patients' (51.6% vs. 20%, respectively, $z = 2.57$, $p < .02$).

Residential Outcomes: March 2007 Assessment

Twenty-five (81%) of the 31 Keeping Home patients were retained in their apartments as of March 2007. Eleven (36.7%) comparison participants discharged from methadone maintenance treatment by then were housed and none were living on the streets or in other public places. Whether comparing Keeping Home patients to all housed comparison participants (81% vs. 36.7%) or just to those living in private residences (16.7%), the Keeping Home patients' housing outcomes are clearly superior (Table 2).

June 2008 Assessment

Keeping Home patient retention in apartments decreased to 67.7% (21 of 31 patients), with four additional discharges between March 2007 and June 2008. Only 6 comparison patients were retained (in methadone maintenance treatment) through June 2008, and of the 3 (of

TABLE 2. Methadone Maintenance Treatment and Residential Outcomes for Keeping Home ($n = 31$) and Comparison Patients ($n = 30$) as of Assessment 1 (March, 2007) and Assessment 2 (June, 2008)

Retention	Keeping home patients ($n = 31$) No.	%	Comparison participants ($n = 30$) No.	%	Test	*P*
Retained in methadone maintenance treatment as of March 2007	20	64.5	10	33.3	$z = 2.44$	$< .02$
Retained in methadone maintenance treatment as of June 2008	16	51.6	6	20.0	$z = 2.57$	$< .02$
Retained in own apartment/housed as of March 2007	25	80.6	11	36.7	$z = 3.16$	$< .01$
Retained in own apartment/housed as of June 2008	21	67.7	1	3.7	$z = 4.22$	$< .001$

6) with a known residential status just 1 was living in a private residence. Even if the 3 (of 6) patients with unknown housing status were housed, the difference of 67.7% Keeping Home versus 13.3% (4/30) comparison patients is still highly significant (Table 2).

DISCUSSION

Homeless, severely mentally ill methadone maintenance patients face formidable life difficulties shown clinically, in part, by erratic participation in treatment. Effectively addressing homelessness among dually diagnosed individuals is rare.[8] Further compounding these difficulties is the stigma associated with the status of methadone patient[9,10] and de facto discrimination against them in supported housing programs.

The current results are welcome for such a difficult set of patients and are generally consistent with previous results using the Housing First approach. However, a 2009 review by Kertesz et al.,[11] although supporting Housing First's superior housing outcomes compared with continuum-of-care or Treatment First approaches, suggests that claims of better Housing First treatment outcomes as well need to be tempered pending more research. The recent results of Collins et al.[12] and Padgett et al.[13] add further support for Housing First's better treatment as well as housing outcomes. Collins et al.[12] found significantly reduced alcohol use with longevity in housing among chronically homeless, serious alcohol abusers in a project-based HF initiative (multiple apartments, single-site). Padgett et al.[13] found a lower Absent Without Leave rate of treatment for a Housing First compared with a continuum-of-care sample, and both groups of substance abusers having high rates of primary Axis I diagnoses. The results were clearly at odds with the view that under Housing First's harm reduction approach, substance abuse would either continue unchanged or even increase.

The Keeping Home patients' superior housing and methadone maintenance treatment outcomes need to be viewed cautiously despite our conservative assumptions about treatment cessation for four Keeping Home patients. Differences in age, homelessness circumstances, and the severity of psychiatric diagnoses may have affected outcomes though the likely influence of such client/pretreatment factors is small.[14,15] Research is needed to explicitly evaluate their possible effects.

An obvious concern is that three Keeping Home but no comparison patients died during the study. O'Connell[16] indicates that homeless individuals are 3 to 4 times more likely to die prematurely than the general population, and those who live chronically on the streets are at especially great risk for life-threatening diseases, trauma, and violence and less likely to get needed medical treatment. The stabilizing influence of the Housing First intervention may have arrived too late for some patients. Furthermore, the policy of Pathways to Housing, Inc., to recruit the chronically homeless selects for the more medically vulnerable. Future research is needed on homelessness chronicity, the medical conditions Housing First (and all other) methadone maintenance treatment patients experience and their causes of death.

In view of the endemic problems of many of the Keeping Home's seriously and persistently mentally ill patients, it is probable that assertive community treatment services are essential to helping them stay in their apartments and contribute to treatment adherence. However, as done since Housing First was introduced, Keeping Home was implemented as an integrated intervention; future research is needed to determine the relative contributions of assertive community treatment services, Housing First apartments, and of methadone maintenance treatment itself to the present results; however, considering the sizable differences in outcome as a matter of policy, more Housing First initiatives are clearly warranted among homeless, mentally ill methadone maintenance treatment patients.

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